Shell Chemical Fire, Deer Park, Tx

Overview:

An OSC and START were re-mobilized to the Shell Chemicals LP facility fire located at 5900 Highway 225 in Deer Park, Tx, 77536, to assess site conditions and provide air monitoring. The Olefins 3 Unit reignited due to residue in the concrete containment area according to the Shell Chemicals LP representative. NRC Report 1366545 states the incident occurred on 05.06.23 at 1515 hours. No injuries or evacuations have been reported at this time. The facility is an RPM, FRP and SPCC facility. CTEH is still onsite and will continue monitoring for the facility. The area has four EJ indices above the 80th percentile within a 1-mile radius.

State, Local, and other Federal Agency actions and roles:

TCEQ mobilized and will has ground air monitoring teams. Channel Industries Mutual Aid (CIMA) was also called to assist with the response.

EPA Actions:

The EPA team conducted air monitoring with a MultiRae for lower explosive limit (LEL), percent oxygen (%O2), carbon monoxide (CO), hydrogen sulfide (HS) and volatile organic compounds(VOC) and a pDr 1000 for total particulates. The MultiRae readings were %O2: 20.9%, LEL: 0%, CO: 0 ppm, HS: 0 ppm, VOC: 0 ppm. The pDr highest readings was 0.05 mg/m3 downwind of a busy highway and the lowest (0.02 mg/m3) occurred in the Marwood community to the northwest of the fire location. During the incident update at 0030 hours on 5/7/2023, Shell confirmed current efforts are being made to isolate hydrocarbons from the fire in an effort to starve the fire for fuel. Firefighting water accumulating in the Big Ditch is being pumped with 3-1,500 gpm diesel pumps to the storm water impoundment basin (SWIB), and 2 more are being added. It is estimated only 16 hours of pumping can be conducted before the SWIB, currently has a freeboard of 8 feet and only 2 feet of freeboard can be used. No estimate of when the hydrocarbons will be fully isolated from the fire. EPA team will continue community air monitoring until fire is out.

The EPA received NRC1366566 which occurred on 05.07.23 at 0635 hours. firefighting water with hydrocarbons released to storm drain leading to Houston Ship Channel. Unauthorized controlled discharge. The USCG is onsite and in Unified Command. Estimated 11,200 g/min flow rate to Houston Ship Channel.